ABSTRACT

A composition useful for nitrate removal, and treatment of water, selected from mining, agriculture industries, military operations, or others water stream, or industrial waters, livestock wastewater and a livestock water stream or from other sources, which comprises a sufficient amount of organic modified clay, a highly crosslinked carbohydrate polymer with branched-chain structure and having present sulfide ordisulfide group, or alloy or blend with triazine-trithione sodium salt, high swelling sodium bentonite or calcium bentonite, and activated carbon, without pH adjustment, and/or presents of electropositive metals inorganic acid or alkaline compounds.